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## Taiwan

## Grain and Feed

## Annual

## 2002

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### Report Highlights:

Total corn and wheat imports for 2002-3 are forecast at 4.8 and 1.0 million metric tons (mmt), respectively, of which 95 percent are expected to come from the U.S. Declining livestock and poultry production will likely depress future corn imports. Taiwan published its public rice import tender rules on April 30. Private rice imports are well underway. The Department of Health received all nine corn biotech event registration packages that they anticipated by the April 30 deadline.

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Includes PSD changes: Yes

Includes Trade Matrix: No

Annual Report

Taipei [TW], TW

## **SECTION I. SITUATION AND OUTLOOK**

### **Wheat Situation and Outlook**

#### **Imports**

Total 2002 wheat imports are forecast at one million metric tons (mmt), almost all of which is US#1 wheat. The U.S. is expected to continue dominating the Taiwan wheat import market. Taiwan does not produce wheat so all demand is met by imports.

In 2001, Taiwan imported 1.02 mmt of wheat, down 12 percent from the previous year due mainly to high carryover stocks. Approximately 61 percent of imports were HRS or DNS, while 28 percent was HRW, 10 percent Soft White or Western White, and 1 percent Durum. The United States was the major supplier, with 97 percent share of the total imports. Australia supplied the remaining 3 percent.

Taiwan imports very little flour. Imports in 2001 totaled only 15 tmt, or 2 percent of supply. Of the 2001 flour imports, Japan supplied 12 tmt, Australia 2 tmt, and Korea 1 tmt.

#### **Consumption**

Despite already high per-capita levels, consumption is expected to continue increasing slowly. Behind this expansion is the dynamism of the wheat food market driven by Taiwan's 6,000 bakeries, convenience stores, and super markets. Taiwan consumers are generally very receptive to new products, which encourages many new product launches. This factor and the continued high level of noodle consumption, are expected to support increased demand for wheat and wheat flour.

#### **Policy & Prospects**

##### Trade with China

Taiwan joined the WTO in January 2002. Local industry expects that Taiwan will lift import bans on PRC wheat, flour, and some wheat food products in the next year or two. Taiwan authorities review these restrictions every six months with the next review scheduled for June 15, 2002. Despite the prospect of liberalization, Post does not anticipate an immediate threat to U.S. wheat imports for two reasons:

- Imports of PRC instant noodles, which are anticipated to compete strongly in the Taiwan instant noodle market, are banned. Taiwan's top two instant noodle producers invested heavily in mainland China and plan to ship from the PRC to Taiwan when Taiwan ends its import ban on instant noodles. This potential flood of Chinese products could greatly influence the domestic flour and instant noodle market, making it less likely that Taiwan authorities will lift the ban quickly.
- In the absence of substantial technical assistance, it will take time for most Taiwan millers to learn

how to mill PRC wheat, to blend PRC flour, and to introduce new flour products.

However, PRC wheat and products could have significant impact on U.S. wheat exports to Taiwan in the long run by cutting demand for HRW, WW and SW wheat while possibly boosting it for DNS wheat. Since China produces middle protein wheat and little high protein wheat, Taiwan millers anticipate stiff competition in the low end flour market, where flour is used for making cookies and gluten products. This is around 12 percent of the total flour market. On the other hand, Taiwan millers hope to supply the high quality flour market on the Mainland. In anticipation of these changes, the Taiwan Flour Millers Association (TFMA) plans to visit the PRC in the second half of 2002 to study the PRC wheat supply situation, the PRC flour market, and China's import policies. China's potential for feed grain production has also stimulated interest by Taiwan's feed milling industry in importing feed wheat.

#### End of the Wheat Stabilization Fund

The Wheat Stabilization Fund will close by June 2002 as a result of Taiwan's accession to the WTO. After that, Taiwan's domestic flour prices will move with world wheat prices. This might encourage local wheat millers to import US#2 grade wheat when world market prices are high. This is also expected to increase competition from imported flour and amongst local millers. Some inefficient small scale mills may be consolidated with large mills or shut down completely. The current two wheat buying groups also may break up into more groups. Under the current group buying mechanism, every mill purchases wheat at the same price -- despite its size. This leaves some older, small flour mills, which have largely depreciated their equipment, able to compete with the few larger and more efficient mills.

## **Corn Situation & Outlook**

### **Imports**

Total corn imports for 2002/3 are forecast at 4.8 mmt. This is in line with a forecast decline in meat production due to post-WTO production adjustments in the swine and poultry sectors. Taiwan's corn market is supplied almost exclusively by imports.

Taiwan's corn imports totaled 5.2 mmt in 2001, up 5 percent from a year earlier. The 2001 increase came from increased demand driven by higher hog production which is expected to decline in 2002 due to low prices. The depressed hog market and high corn inventories will likely slow corn imports later in the year. Local feed millers have already announced a 10 percent reduction in corn contracts for June/October delivery.

In 2001, the U.S. had a 98 percent share of total corn imports. Post forecasts that U.S. corn will continue to dominate the Taiwan corn import market. Taiwan is unlikely to import South American corn in 2002 as Taiwan has already contracted corn for June delivery, all from the United States. South American's corn export season usually falls in the May/July period. In addition, Taiwan only considers importing South American corn when there is a \$4/mt price difference from U.S. corn. South American corn is now more expensive than U.S. corn.

### **Consumption**

Taiwan's corn consumption is expected to contract slowly over the next few years. Virtually all of Taiwan's corn consumption is for feed use except for 250 tmt used for wet milling to produce corn syrup. As a result, decreases in local livestock and poultry production will likely cut consumption. The local feed industry forecasts that the eventual liberalization of pork belly and variety meat and chicken meat imports, will cut total feed demand to 7 mmt by 2005 from the current 7.6 mmt. In 2003 and 2004, increasing Tariff Rate Quotas for these meats are likely to cut feed demand only 1 to 2 percent annually. Current hog prices are close to the break-even price of NT\$3,800 per 100 kg carcass weight, encouraging contraction in the industry.

In 2001, Taiwan's feed inclusion rate for corn was approximately 69 percent based on corn supply and feed production figures. The feed inclusion rate of other feed grains combined is about 2 percent to 4 percent, including approximately 130 tmt of barley, 40 tmt of sorghum, and 65 tmt of rice. It is unlikely that other feed grains will be substituted for corn in 2002 and 2003 given current low world corn prices.

### **Policy & Prospects**

#### Trade with China

Currently, Taiwan bans PRC corn imports. However, Taiwan authorities review these restrictions every

six months with the next review scheduled for June 15, 2002. Several feed millers that have invested in mainland China have petitioned Taiwan authorities to lift the import ban. If trade is permitted, the geographic proximity of Northeast China to Taiwan could allow smaller shipments, prompter delivery and lower carrying costs for Taiwan importers compared to U.S. corn. However, the price gap between domestic PRC corn prices and U.S. CIF corn prices still favors the latter. As a result, Chinese corn would not be competitive in Taiwan even if the import ban were lifted, unless China subsidized exports. Post notes that recent sales of PRC corn to South Korea for September delivery raises concern that continued export subsidies may provide an impetus for certain Taiwan feed millers to demand lifting of the import ban.

### Livestock Initiatives

To adjust to post-WTO realities and the eventual 2005 import liberalization, Taiwan's feed industry and swine and poultry sectors are working to improve their competitiveness. The National Animal Industry Foundation (NAIF) was formed in January 2000. It is attempting to differentiate locally produced chicken and pork products from imported meat products by establishing logos related to freshness and taste. The Taiwan Council of Agriculture (COA) is also attempting to improve the quality of domestically produced meat and poultry products in order to compete with imported products. In January 2001, COA promulgated more stringent regulations on feed additives, chemicals and antibiotic residues in meat and poultry products. The COA also has in place an active FMD eradication program and requires to FMD vaccination certificates at hog slaughter houses. Reportedly, now 80 percent of local swine herds have received two doses of FMD vaccine, compared to 20 percent in 1998. Taiwan reported the last FMD case on February 25, 2001. Post does not believe these efforts will necessarily boost livestock production, although they may slow its decline slightly. If Taiwan achieved FMD-free status, Post would expect pork production to rise in response to anticipated export demand. However, FMD free status is at least two years away.

### Biotechnology Update

On Feb. 23, 2001, the Taiwan Department of Health (DOH) promulgated regulations on bioengineered food labeling and registration (see TW1007). Initially, these regulations only pertain to corn and soybeans and certain of their products. All bioengineered varieties of corn and soybeans must be registered with the Food Sanitation Bureau (FSB) of the Department of Health (DOH) before April 30, 2002. Failure to do so means that the variety will not be approved when the bioengineered food labeling regulation comes into effect on January 1, 2003 (no bioengineered labeling is required for feed). After that date, no unapproved bioengineered soybean and corn foods may be commercialized.

Currently, Taiwan accepts U.S. and other advanced country approvals as a basis of commercialization. This will change once Taiwan's own bioengineered food registration procedures go into effect. Currently, life science companies have submitted registration packages for all nine biotech corn events which DOH anticipated receiving. However, none of the corn or soybean events have been approved yet for commercialization, a cause for some concern. DOH has had the package for one event for almost one

year. Local feed millers and soybean crushers plan an industry meeting with Taiwan authorities in Summer 2002 to discuss post 2002 corn and soybean import requirements in order to avoid trade disruptions.

## **Rice Situation & Outlook**

### **Imports**

Under its WTO accession agreement, Taiwan must allow minimum market access (MMA) of 144,720 mt on a brown rice basis in 2002 (equivalent to 127,353 mt on a milled rice basis). Of this total, 65 percent will be for the government trade and 35 percent for the private trade. All grain dealers who have registered with COA and have a grain dealer license may apply for rice import quotas. Grain dealers will be granted rice import licenses if they have quotas for rice imports. Taiwan published its government tender documentation on April 30 to begin an eight-day review and comment period. The tender documents are only available in Chinese. The first government import tenders are expected to occur in May/June 2002. (Refer to TW2009 for government imports, TW2008, TW20012, and TW20014 for private imports, and TW2002 for post-WTO rice market environment). While all of the initial 10,000 tons of private rice import rights were purchased by importers for NT\$17.26/kg. or more, Post expects that the next 20,000 tons of import rights will likely be purchased for NT\$14.26 to NT\$17.26/kg. (Current Exchange rate: U.S.\$1=NT\$34.77) Actual 2002 imports should be slightly higher than the MMA because COA allocates private import quotas on a brown rice basis, but importers import rice on a milled basis.

### **Production**

The Council of Agriculture (COA) forecasts 2002 rice production at 1.2 mmt from 300,000 hectares of land, a 4 percent drop from 2001. COA indicates that any effect of the current drought on the first rice crop will likely be made up by increased area planted for the second. Domestic rice is not price competitive on the world market, because of production costs which vary between \$550/mt and \$820/mt (milled basis) depending on crop season and producing location. Taiwan has committed to stop selling surplus rice onto the world market at discounted prices after WTO entry. Consequently, Taiwan has to cut its rice production in an attempt to balance increased supplies from MMA imports. Smaller domestic supplies have prevented price cuts resulting from the small influx of private sector imports which begun arriving in April. Previously, COA expected domestic rice prices to fall significantly because of increased imports.

Before Taiwan joined the WTO, rice imports were banned, with the exception of glutinous or broken rice. Imported rice was for processing use and processed rice products were for re-exportation. In 2001, Taiwan imported 6 tmt of glutinous rice and exported 156 tmt of rice to African countries. Taiwan has committed to stop selling surplus rice on the world market at discounted prices after WTO entry. Total 2002 rice exports are forecast at 93 tmt. According to COA, all 2002 exports were contracted before the WTO entry. No rice exports are anticipated in 2003.



## Consumption

Total domestic rice consumption in 2002 and 2003 is estimated to fall slightly because of less old rice available for feed use. The table rice consumption forecast remains at 1.2 mmt.

According to the COA *Taiwan Food Balance Sheet*, total domestic rice consumption was 1,354 tmt in 2000, of which 48 tmt was used for feed; 15 tmt for planting; 80 tmt for processing; 13 tmt wasted; while 1,198 tmt went for table rice use. Per capita rice consumption has been falling steadily for the past two decades because of rising disposable income, increasingly western-style consumption patterns and the replacement of cereals by meats in the diet. Per capita rice consumption in 2000 was 54.17 kg, compared to 54.90 kg in 1999 and 65.94 kg in 1990.

## Policies and Prospects

Taiwan rice millers are using different market strategies to respond to the post-WTO market. Large millers are both importing and investing in new milling/packing facilities to improve rice quality in order to compete with imported rice. One top local miller has taken out newspaper ads for imported U.S., Japanese, Australian, and Thai rice sold under his brand. Some millers claim that they will stick with locally grown rice and segregate the market from imports by increasing their advertising budgets. The COA is training its staff to inspect packaged rice in retail outlets to improve domestically grown rice quality to be able to compete with imported rice (see TW0004 for Taiwan rice sanitary and quality standards). The actions of these inspectors vis-a-vis imported rice will need to be monitored. Imported rice is subject to pesticide maximum residue level, heavy metal and aflatoxin inspections by the import inspection authority, BSML. This raises some national treatment concerns as rice moving in domestic channels does not appear to be subject to such inspection. Post is taking this matter up with Taiwan authorities.

## Other Grains Situation & Outlook

Taiwan imported 195 tmt of barley in 2001, with 17 percent sourced from the U.S. Approximately 65 tmt was malting barley for beer brewing. Taiwan produced about 400 million liters of beer in 2001. After Taiwan abolished the tobacco and wine monopoly in January 2002, there is market potential for U.S. barley, hops, and other microbrew ingredients. The Taiwan Tobacco and Wine Board plan to franchise with local restaurants to built three microbrewery restaurants in northern, central and southern Taiwan. One U.S. - based company has been very active in promoting the sale of microbrewery equipment and ingredient packages.



## SECTION II. STATISTICAL TABLES

**Table 1. Wheat Production Supply and Demand**

PSD Table						
Country	Taiwan					
Commodity	Wheat				(1000 HA)(1000 MT)	
	Revised	2000	Preliminary	2001	Forecast	2002
	Old	New	Old	New	Old	New
Market Year Begin		01/2001		01/2002		01/2003
Area Harvested	0	0	0	0	0	0
Beginning Stocks	300	367	290	317	230	237
Production	0	0	0	0	0	0
TOTAL Mkt. Yr. Imports	1050	1020	1000	1000	0	1000
Jul-Jun Imports	1050	1048	1000	1000	0	1000
Jul-Jun Import U.S.	942	1021	0	950	0	950
TOTAL SUPPLY	1350	1387	1290	1317	230	1237
TOTAL Mkt. Yr. Exports	17	0	10	0	0	0
Jul-Jun Exports	17	0	10	0	0	0
Feed Dom. Consumption	45	0	45	0	0	0
TOTAL Dom. Consumption	1043	1070	1050	1080	0	1085
Ending Stocks	290	317	230	237	0	152
TOTAL DISTRIBUTION	1350	1387	1290	1317	0	1237

**Table 2. Corn Production Supply and Demand**

PSD Table						
Country	Taiwan					
Commodity	Corn				(1000 HA)(1000 MT)	
	Revised	2000	Preliminary	2001	Forecast	2002
	Old	New	Old	New	Old	New
Market Year Begin		01/2001		01/2002		01/2003
Area Harvested	5	14	5	12	0	12
Beginning Stocks	1475	1455	1401	1522	1325	1345
Production	24	59	24	53	0	53
TOTAL Mkt. Yr. Imports	4902	5198	4700	4700	0	4800
Oct-Sep Imports	4902	5074	4700	4820	0	4800
Oct-Sep Import U.S.	4875	5003	0	4720	0	4560
TOTAL SUPPLY	6401	6712	6125	6275	1325	6198
TOTAL Mkt. Yr. Exports	0	0	0	0	0	0
Oct-Sep Exports	0	0	0	0	0	0
Feed Dom. Consumption	4800	4940	4600	4680	0	4615
TOTAL Dom. Consumption	5000	5190	4800	4930	0	4865
Ending Stocks	1401	1522	1325	1345	0	1333
TOTAL DISTRIBUTION	6401	6712	6125	6275	0	6198

**Table 3. Wholesale Corn Prices**

Prices Table			
Country	Taiwan		
Commodity	Corn		
Prices in	NTD	per uom	100 kilogram
Year	2001	2002	% Change
Jan	663	524	-20.97%
Feb	605	508	-16.03%
Mar	632	501	-20.73%
Apr	603		-100.00%
May	556		-100.00%
Jun	552		-100.00%
Jul	548		-100.00%
Aug	540		-100.00%
Sep	516		-100.00%
Oct	515		-100.00%
Nov	512		-100.00%
Dec	517		-100.00%
Exchange Rate	34.77	Local currency/US \$	

**Table 4. Rice Production Supply and Demand**

PSD Table						
Country	Taiwan					
Commodity	Rice, Milled				(1000 HA)(1000 MT)	
	Revised	2000	Preliminary	2001	Forecast	2002
	Old	New	Old	New	Old	New
Market Year Begin		01/2000		01/2001		01/2002
Area Harvested	340	340	338	338	0	300
Beginning Stocks	124	651	84	525	63	370
Milled Production	1342	1342	1245	1245	0	1197
Rough Production	1906	1906	1750	1750	0	1744
MILLING RATE (.9999)	7040	7040	7115	7115	0	6864
TOTAL Imports	3	6	23	6	0	133
Jan-Dec Imports	23	6	125	6	0	133
Jan-Dec Import U.S.	0	0	0	0	0	64
TOTAL SUPPLY	1469	1999	1352	1776	63	1700
TOTAL Exports	120	120	90	156	0	93
Jan-Dec Exports	90	120	90	156	0	93
TOTAL Dom. Consumption	1265	1354	1199	1250	0	1250
Ending Stocks	84	525	63	370	0	357
TOTAL DISTRIBUTION	1469	1999	1352	1776	0	1700

Note: the milling rate used in this report is 0.704; 0.8 for brown rice from paddy rice, and 0.88 for milled rice from brown rice.

**Table 5. Rice Retailing Prices**

Prices Table			
Country	Taiwan		
Commodity	Rice, Milled		
Prices in	NTD	per uom	100 kilogram
Year	2001	2002	% Change
Jan	3250	3597	10.68%
Feb	3247	3728	14.81%
Mar	3253	3745	15.12%
Apr	3263		-100.00%
May	3237		-100.00%
Jun	3183		-100.00%
Jul	3183		-100.00%
Aug	3157		-100.00%
Sep	3180		-100.00%
Oct	3300		-100.00%
Nov	3477		-100.00%
Dec	3453		-100.00%
Exchange Rate	34.77	Local currency/US \$	

Table 6. Tariff Rates for Grains

HS Code	Grains	Current Tariff (%)
<b>1001.10 &amp; 1001.90</b>	Wheat	6.5
<b>1101.00</b>	Wheat Flour	20*
<b>1005.10</b>	Corn	0
<b>1007.00</b>	Sorghum	0
<b>1003.00</b>	Barley	0
<b>1006</b>	Rice	0**
<i>Source: Taiwan Customs Tariff Schedule</i> * will be reduced to 19% in 2003, and 17.5% in 2004 ** be replaced by market up price ceiling at NT\$23.26 per kg		

Table 7. Meat Production for 1999-2001 in 1,000 mt

Production	1999	2000	2001	2002	2003
<b>Pork</b>	822	921	962	930	910
<b>Poultry</b>	727	727	706	638	620
<i>Source: Council of Agriculture</i>					

Table 8. Feed Production for 1999-2003 in 1,000mt

Feed Production	1999	2000	2001 (estimate)	2002 (estimate)	2003 (estimate)	2004 (estimate)
<b>Total Compound Feed Produced</b>	<b>6,969</b>	<b>7,693</b>	<b>7,600</b>	<b>7,200</b>	<b>7,100</b>	<b>7,000</b>
<b>by commercial producers</b>	<b>5,190</b>	<b>5,232</b>	<b>5,015</b>	<b>4,680</b>	<b>4,615</b>	<b>4,550</b>
<b>by integrated producers</b>	<b>1,779</b>	<b>2,460</b>	<b>2,585</b>	<b>2,520</b>	<b>2,485</b>	<b>2,450</b>
<p><b>Note:</b> Feed production estimates are based on the revised data for 2000.  <i>Source: Data for 1999-2000 feed production are official numbers from the Council of Agriculture</i></p>						